

JAN 28 1969

APOLLO PROGRAM DIRECTIVE NO. 48

TO : DISTRIBUTION

FROM:

[Signature]
APOLLO PROGRAM DIRECTOR

SUBJECT : Apollo Postflight Crew Debriefings

OFFICE OF PRIME RESPONSIBILITY: Apollo Operations (MAO)

ACTION : This directive applies to the Apollo Program Office and the OMSF Centers.

REFERENCE: (a) Apollo Program Directive No. 43, dated June 22, 1968
(b) Apollo Program Directive No. 4J, dated November 20, 1968

I. PURPOSE

The purposes of this directive are:

1. To establish the requirement for the issuance of an Apollo Postflight Crew Debriefing Plan for each manned Apollo mission.

2. To establish attendance criteria for Postflight Crew Debriefings and specific approval procedures for attendance at the Program and Project Debriefing.

II. SCOPE

Postflight debriefing reviews are conducted to gather data obtained by the flight crew on each manned Apollo mission. Evaluations, observations, and other assessments by the flight crew provide valuable guidance for subsequent manned flights. A crew debriefing plan will insure that the appropriate information is made available for crew training, space vehicle configuration, and operational planning for follow-on missions.

III. RESPONSIBILITIES

The MSC Director of Flight Crew Operations (FCOD) is responsible for the development and coordination of a Flight Crew Postflight Debriefing Plan, as described in paragraph IV, for each manned mission. The Director, FCOD, will insure appropriate notification and coordination has been effected with the other centers and that the debriefing plan is forwarded to the Apollo Mission Director for his review and concurrence. The Director, FCOD, will restrict

attendance at the debriefings to those participants identified in the Flight Crew Postflight Debriefing Plan. Attendees for the Program and Project Debriefing will be identified in a separate memorandum prepared by the Mission Director.

IV. FLIGHT CREW DEBRIEFING REQUIREMENTS

A. Flight Crew Postflight Debriefing Plan

The Director, Flight Crew Operations will issue a Flight Crew Debriefing Schedule 45 days prior to the launch date as scheduled in Reference (b). A Flight Crew Debriefing Plan is to be issued 20 days prior to the launch date. As a minimum, the Debriefing Plan is to contain the debriefing schedule, a debriefing synopsis, and a list of participants.

B. Debriefings to be Scheduled

The Flight Crew Debriefing Plan will identify the following minimum debriefings to be conducted:

1. Technical Crew Debriefing: Records the flight crew's assessment of the flight as soon as possible after recovery.
2. Medical Examinations: Ensures definite times are available to conduct the necessary medical examinations.
3. Photographic Identification Debriefing: Obtains the aid of the flight crew in conducting a quick look identification of the photography.
4. Experiments and Operational Test Debriefings: Provides for the discussion of pertinent scientific observations and exchange of information between the Flight Crew and scientific evaluation team members. This debriefing may be scheduled in conjunction with the Photographic Identification Debriefing dependent upon the number of scientific tasks assigned the particular mission.
5. Follow-on Flight Crew Debriefing: Facilitates the flow of explicit flight/operations information to subsequent flight crews.
6. Systems Debriefing: Clarifies and identifies whatever major problems may have developed during the operation of each major system.
7. Program and Project Debriefing: Provides key program personnel the details of the flight and discusses all anomalies and unusual occurrences.

JAN 28, 1969

C. Attendance

Center Program Managers will coordinate the names of their respective Center's attendees at these debriefings. Names of the attendees are to be submitted to the Director, FCOD, with a copy to the Apollo Mission Director at least 35 days prior to launch. In preparing their list of participants to the various debriefings, all Centers will restrict attendance to those personnel who must obtain and use mission data prior to the availability of the mission reports. Special attendance requests for the Program and Project Debriefings are to be submitted directly to the Apollo Mission Director.

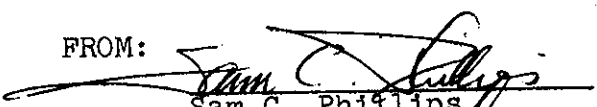
Approximately 30 days prior to launch, the Mission Director will forward a letter to the Director, FCOD, that identifies total attendance at the Program and Project Debriefing and also designates NASA Headquarters participants at other debriefings.

2/25/69

APOLLO PROGRAM DIRECTIVE NO. 49

TO : DISTRIBUTION

FROM:


Sam C. Phillips
Lt. General, USAF
Apollo Program Director

SUBJECT: Apollo Pre-flight Microbial Sampling

OFFICE OF PRIME RESPONSIBILITY: MSF Medicine (MM)

- REFERENCES:
- (a) NPD 8020.7, "Outbound Spacecraft: Basic Policy Relating to Lunar and Planetary Contamination Control", September 6, 1967
 - (b) NMI 1052.90, "NASA-Departments of Agriculture; Health, Education and Welfare; Interior and the National Academy of Sciences Inter-agency Agreement - Protection of the Earth's Biosphere from Lunar Sources of Contamination", August 24, 1967.
 - (c) NPD 8020.8, "Outbound Lunar Biological Contamination Control: Policy and Responsibility"
 - (d) Joint OSSA/OMSF Operating Agreement for Pre-flight Microbial Sampling in the Apollo Program, December 23, 1968.

I. PURPOSE

The purpose of this directive is to implement within the OMSF and its Centers the requirements for pre-flight microbial sampling of selected Apollo flight hardware in compliance with references (a) through (d).

II. BACKGROUND

Pre-flight microbial samplings in connection with Apollo flight missions are necessary for the following:

- a. MSF medical needs - to evaluate the biological environment in the habitable area of the Command Module. These needs are normally specified in the "Apollo Medical Operations Plan" developed by the MSC Director of Medical Research and Operations.
- b. Back contamination evaluation requires the identification and quantification of the outbound biological burden. Only by comparison of pre-flight and post-flight microbial analyses is it possible to accurately isolate and identify

potential extraterrestrial life forms carried on returning lunar landing crews, associated materials, and hardware. (References (a) and (b))

- c. Scientific needs - to obtain and maintain for future references a biological contamination inventory for the Moon (Reference (c))

The general policy and responsibility for the protection of the earth's biosphere from lunar sources of contamination will be established by an appropriate NPD.

III. SCOPE

The requirements of this directive apply to the three MSF Field Centers with primary responsibility being vested at MSC.

Microbial sampling procedures are necessary for the following types of Apollo missions:

- a. All manned flights - to meet MSF medical needs to define the habitable environment in the Command Module.
- b. Flights which will or may encounter the Moon - to quantify the biological burden which could be deposited on the Moon.
- c. Flights intended to land on the lunar surface - to expedite the release of returning flight crews, spacecraft, and lunar samples from quarantine, and identify possible extra-terrestrial life forms.

IV. RESPONSIBILITIES

OSSA, Director of Bioscience Programs, within five months of flight readiness date, will furnish OMSF with specific requirements for the microbial sampling of typical Apollo flight missions in accordance with responsibilities assigned by appropriate management directives. In addition, the Director of Bioscience Programs will make available necessary personnel at KSC to develop sampling techniques, undertake actual sampling, and process subsequent samples as might be required by MSF operational elements at KSC.

OMSF, Director of Space Medicine, acting for the Apollo Program Director, will interface with the OSSA Director of Bioscience Programs to obtain the timely submission of microbial sampling requirements, evaluate their technical justification, and furnish validated requirements to the MSC Director of Medical Research and Operations within four months of flight readiness date.

2/25/69

MSC, Director of Medical Research and Operations, will take the action required to integrate into a single overall plan OSSA and OMSF pre-flight microbial sampling requirements and coordinate with:

1. MSC, Apollo Spacecraft Program Manager, to insure compatibility with Command Module and Lunar Module engineering and operational constraints.
2. MSFC, to insure compatibility with engineering and operational constraints of the launch vehicle.
3. KSC, Director of Launch Operations, to determine the feasibility of the requirements and to integrate them into the countdown procedure for the specific mission.

The MSC Director of Medical Research and Operations will, within three months of flight readiness date, furnish the plan to the OMSF Director of Space Medicine (MM) who will review it to insure that full consideration has been given to all known needs for pre-flight microbial samples. Code MM will then furnish a copy of the plan to the Apollo Program Office (Code MAO) for inclusion in the appropriate Mission Implementation Plans.

UNITED STATES GOVERNMENT

Memorandum

TO : Distribution

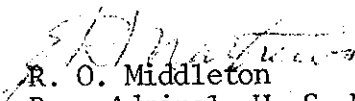
DATE: MAR 5 1969

FROM : Apollo Program Manager, AP

SUBJECT: APD #48, "Apollo Postflight Crew Debriefings"

Reference: Briefing Note to Dr. Debus from AP, dated March 5, 1969,
subject as above, with attachment: APD #48, "Apollo
Postflight Crew Debriefings"

1. APD #48 has been reviewed by AP. The KSC impact is summarized in the reference, see attached copy.
2. No new compliance actions by KSC appear necessary as the APD just formalizes current practice. Therefore, APD #48 is forwarded for your information only.
3. Comments you may have pertinent to the present KSC posture in regard to APD #48 should be directed to the Chief, AP-SVO, prior to April 15, 1969.


R. O. Middleton
Rear Admiral, U. S. Navy

Attachment: As stated

Distribution:
STD-L-B



MAR 7 1969

BRIEFING NOTE TO: Dr. Debus

SUBJECT: APD #48, "Apollo Postflight Crew Debriefings"

1. APD #48, "Apollo Postflight Crew Debriefings," dated January 28, 1969, is a new Apollo Program Directive. It establishes requirements for:

a. The preparation and distribution of an Apollo Postflight Crew Debriefing Plan for each manned Apollo mission.

b. The criteria for attendance at the debriefings and approval for attendance at the Program and Project Debriefings.

2. The Director, Flight Crew Operations, MSC, is responsible for the preparation of a Flight Crew Debriefing Schedule forty-five days prior to the scheduled launch date and the Flight Crew Debriefing Plan twenty days prior to the scheduled launch date. He is also responsible for identifying the participants at all except the Program and Project Debriefings.

3. The Apollo Program Director is responsible for approving plans and schedules and for identifying attendees at the Program and Project Debriefings.

4. The KSC Apollo Program Manager is responsible for providing a list of prospective attendees for all debriefings, except the Program and Project Debriefings, to the Director, Flight Crew Operations. He provides a list of prospective attendees for the Program and Project Debriefings to the Apollo Program Director.

5. APD #48 formalizes previous KSC practice. No new documentation is required.

6. KSC distribution of this APD and a copy of this briefing note will be made to first level Directors.

R. O. Middleton
R. O. Middleton
Rear Admiral, U. S. Navy

Attachment: APD #48